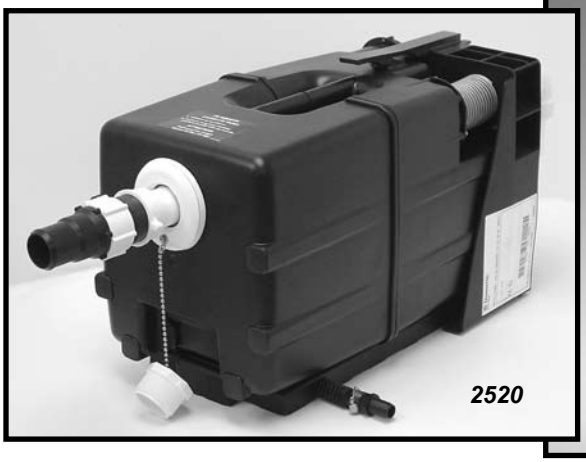
2500 Series
CASSETTE VACUUM TANK
OWNER'S MANUAL

Portable (2510) or Permanent (2520, 2521) Holding Tank System for use with VacuFlush® Ceramic Toilet


2520

2510

NOTICE:
This product is not recommended for use on sailboats.

⚠ WARNING

This manual must be read and understood before service or maintenance is performed. Modification of this product can result in property damage.

Dometic SeaLand

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These operating instructions should be kept in a safe place. If this device is passed on to another owner, please include these operating instructions with it.

INTRODUCTION

Dometic brings the comfort and efficiency of VacuFlush sanitation systems in an easy-to-use and easy-to-maintain package.

Highly Efficient Freshwater Flushing – Uses very little water to make water supplies last longer.

Very Low Power Consumption – 1.5 amps max.

Status Panel – Indicates vacuum status, holding tank full level, tank removal status.

Removable Cassette Holding Tank – "No drip" disconnect and built-in carry handle make it easy to empty holding tank at disposal facility.

Integral Vent Filter – Prevents odors from escaping the holding tank.

Safety Shut-off – Turns off vacuum pump when tank reaches full level or is removed.

Compact, Flexible Installation – Cassette holding tank takes up less than 1.6 cu. ft. (.045 cu. m), and can be placed 20 feet (6 meters) from toilet.

Dometic reserves the right to change specifications without notice.

FOR YOUR SAFETY

WARNING AND SAFETY NOTICES

DANGER

ATTENTION

- **When flushing the toilet, always keep the seat lid closed.**

SYSTEM COMPONENTS

Each cassette vacuum tank includes:

- Portable cassette vacuum tank

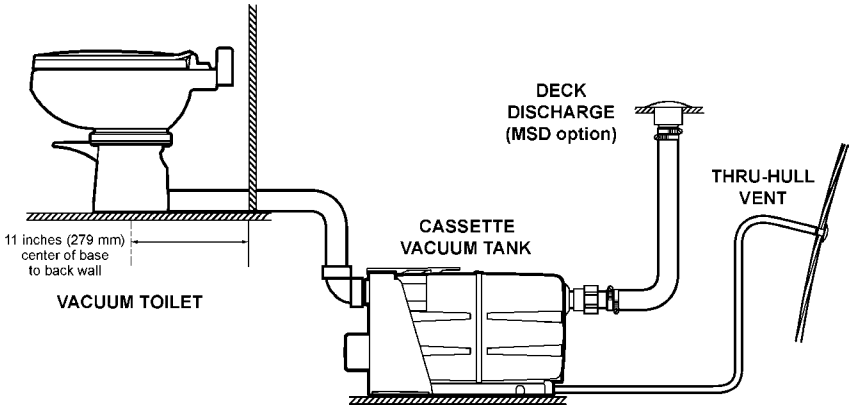
- Cassette docking platform

- Status panel

SANITATION SYSTEM LAYOUT

SYSTEM GUIDELINES

1. Cassette vacuum tank must be used with VacuFlush toilet.
2. VacuFlush toilet must be connected to pressurized water supply (not shown).
3. Centerline of toilet base must be 11 inches (279 mm) from back wall.
4. 5/8-inch (16mm) ID vent hose must be attached to vent fitting (not included).



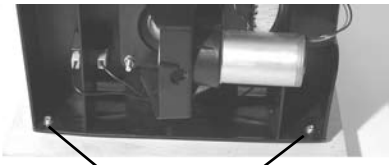
INSTALLATION

DOCKING PLATFORM RISER

1. The riser section of the docking platform is mounted on a level floor using four screws (not supplied). The floor must be strong enough to support the weight of the cassette when full (about 40 lbs. – 18 kg).

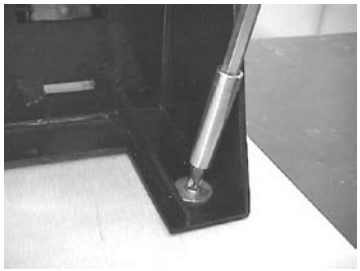
ATTENTION

The riser and base sections must be assembled on the same level surface.



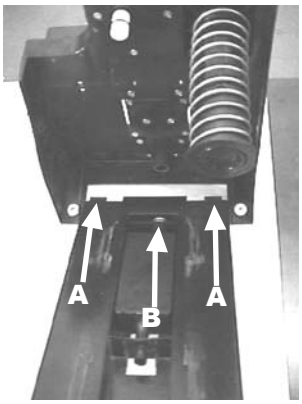
BACK

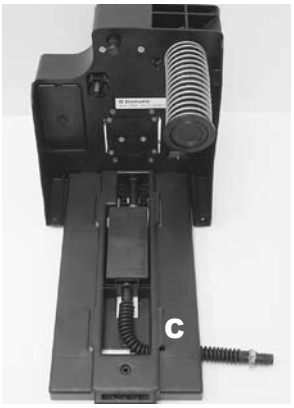
FRONT



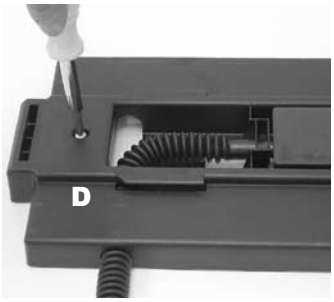
DOCKING PLATFORM BASE

1. The base section of the docking platform is attached to the riser. The base has two tabs (A) that must be pushed into the respective slots in the rear wall of the riser. Make sure that the connection (B) for the carbon filter fits into the space provided.
2. The ventilation hose (C) is routed out the side of the base. Using barbed hose adapter provided, route reinforced 5/8-inch (16mm) vent hose (not supplied) to an outside vent fitting.
3. Fasten the base of the docking platform to the surface (D).





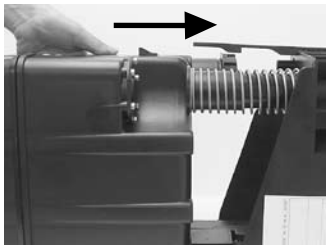
Make sure that the carbon filter fits into the space provided (B) and is properly connected at both ends.

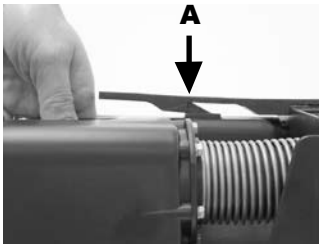


INSTALLATION (cont'd)

INSERTING CASSETTE TANK

Place the cassette tank on the docking platform, then push the cassette tank toward the back of the docking platform until the latch engages (A).

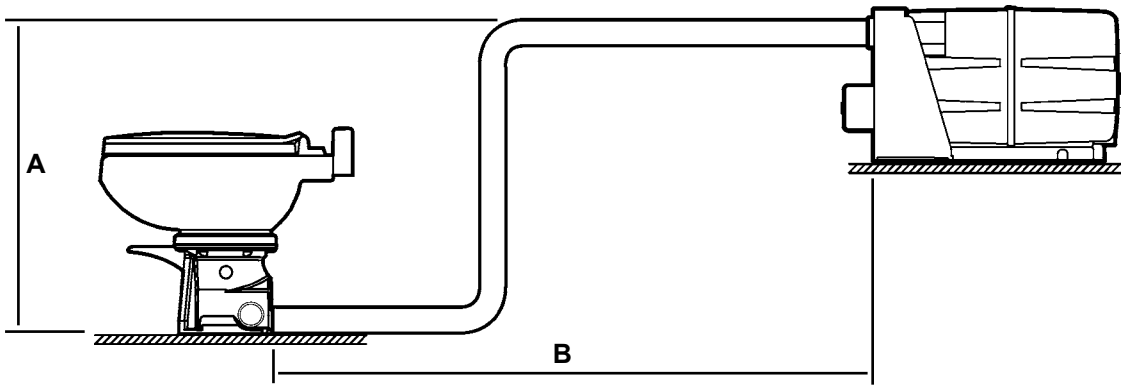




CONNECTING SANITATION HOSE

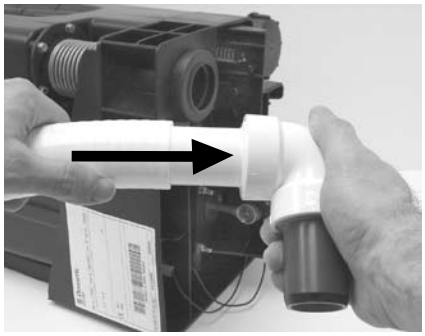
A. Maximum difference in height from toilet to cassette is 3 ft. (1 m).

B. Maximum length of hose between toilet and cassette is 20 ft. (6 m).

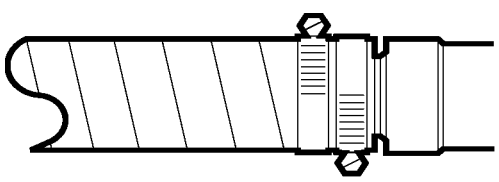


1. Route the sanitation hose from the toilet outlet to to the cassette tank inlet (see tips for routing hose on next page).
2. Connect 1 1/2-in. (38 mm) ID sanitation hose to the white adapter fitting of the elbow assembly (see tips for connecting hose on next page). After pushing hose and fitting together, use two hose clamps to tighten the connection.
3. Push the black adapter fitting of the elbow assembly into the cassette vacuum tank. Turn adapter and hose to best angle.

   Dometic recommends that each hose connection be secured with two hose clamps to prevent any leaks.



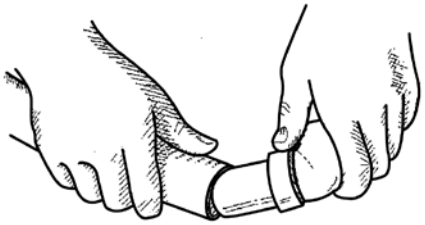
Position hose clamp screws 180° apart from each other and tighten clamps.



INSTALLATION (cont'd)

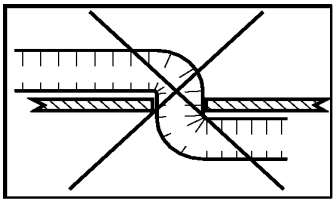
HOW TO MAKE SYSTEM INSTALLATION (AND MAINTENANCE) EASIER

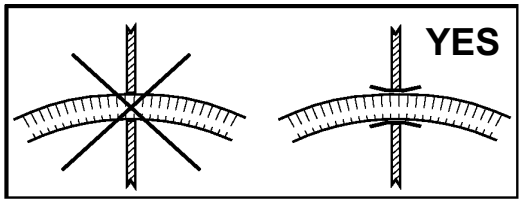
When connecting flexible hose to plastic fittings, use liquid dish soap on end of fitting and inside hose end to make connection easier. A clockwise twist of the fitting while inserting it into the hose makes connection easier.

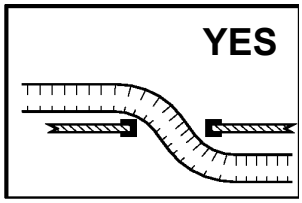


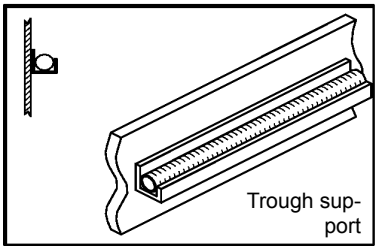
Do not use any other lubricants, sealants or adhesives when connecting sanitation hoses and fittings.

Do not restrict the ability to pull the hose or pipe.









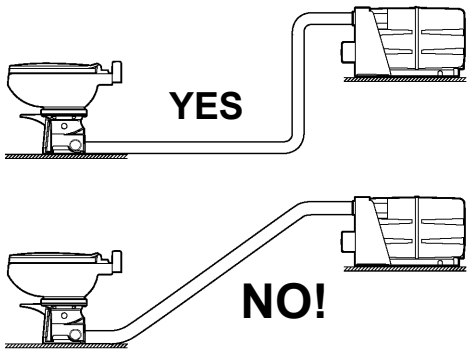
EXCELLENT

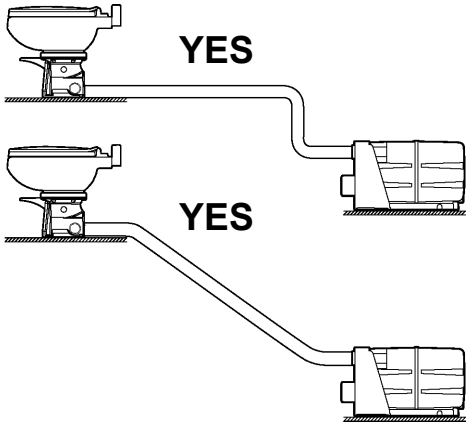
Avoid binding corners and sharp bends.

Do not use wire ties to secure the hose or pipe.

Vertical hose runs should be installed as vertical as possible (no long runs at an angle) for maximum vacuum efficiency.

HOSE LAYOUTS





INSTALLATION (cont'd)

ELECTRICAL INSTALLATION

Electrical installation must be performed by qualified personnel only!

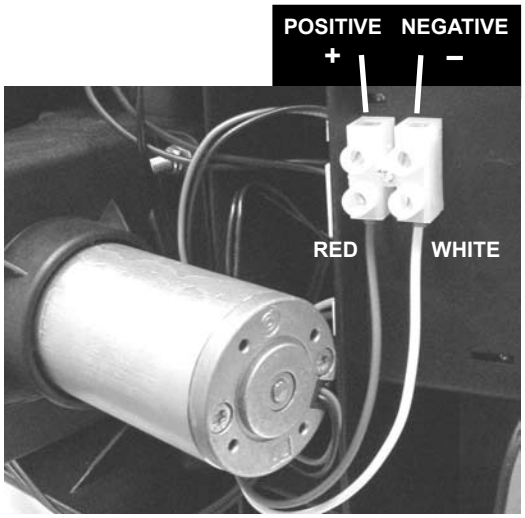
The 12V DC connection to the toilet electronics is shown in the photo.

Connect by correct polarity:

RED + **WHITE –**

The connection wire must be 14-gauge stranded copper wire, and must be protected by a **5-amp fuse** (see wiring diagram).

WARNING: Power wires must be connected as shown. Unit will not operate until power wires are properly connected.



Connecting Status Panel to Docking Platform Circuit Board

The status panel's 4-stranded cable connects to the circuit board (shown below right).

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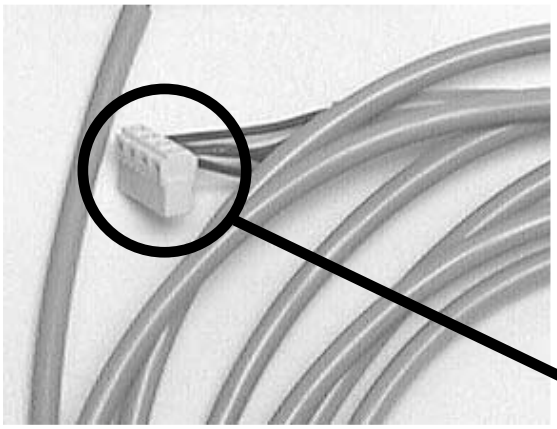
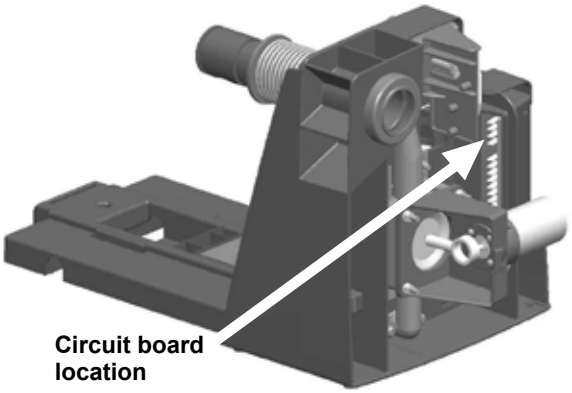
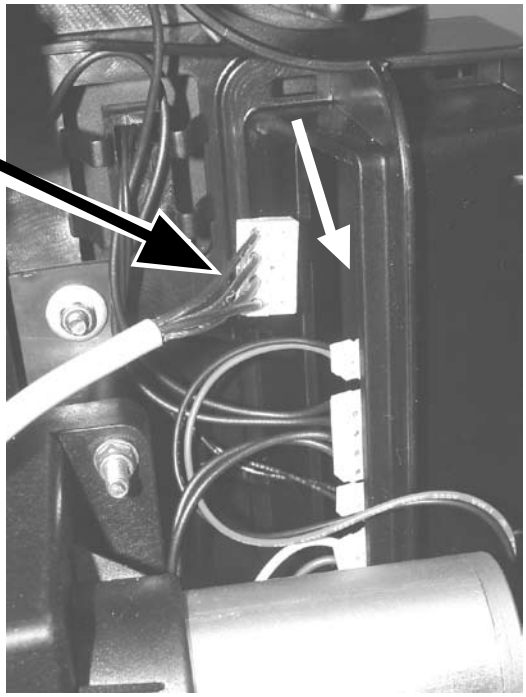
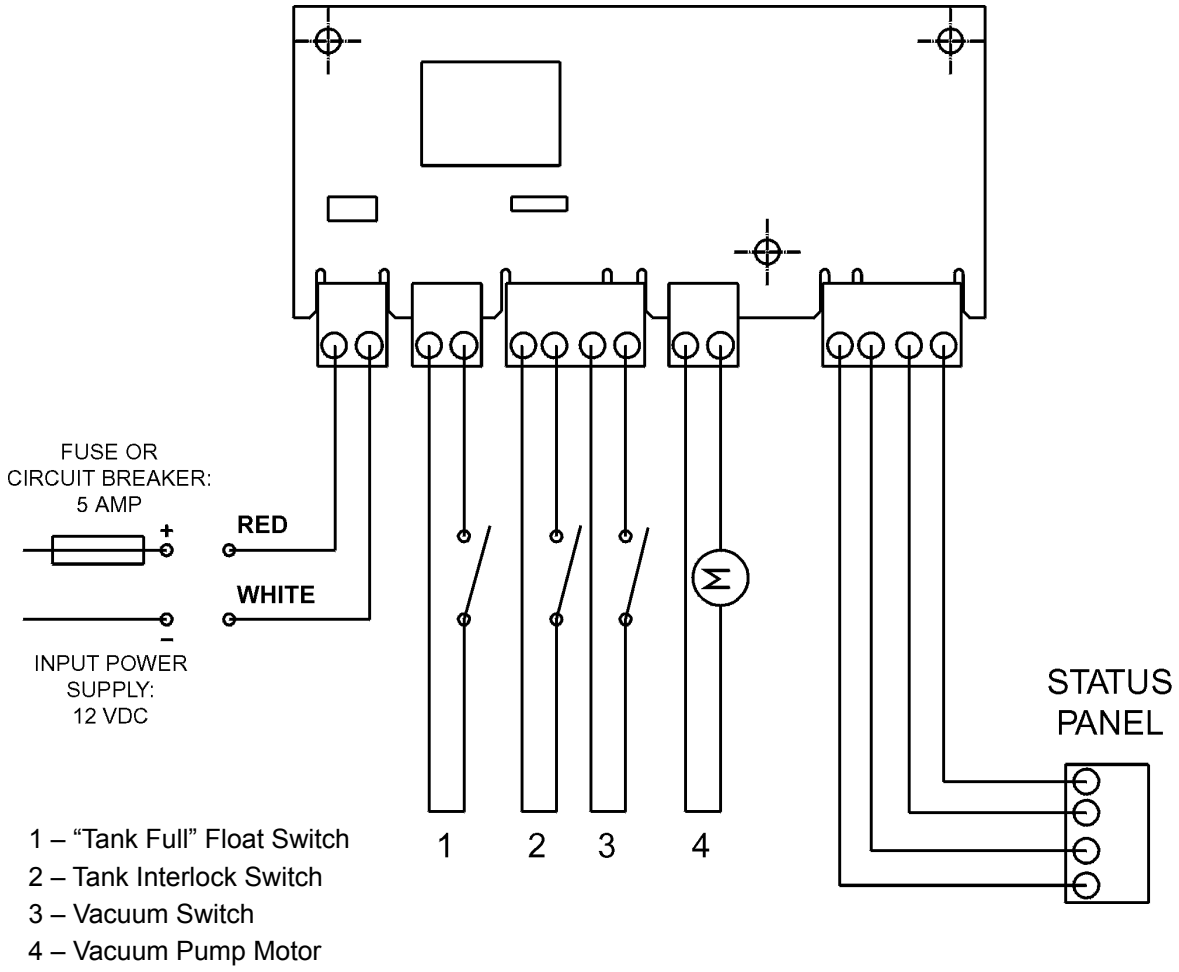






WIRING DIAGRAM



1 – “Tank Full” Float Switch
2 – Tank Interlock Switch
3 – Vacuum Switch
4 – Vacuum Pump Motor

OPERATION

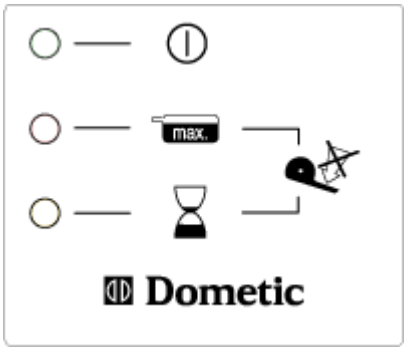
DISPLAY PANEL.

LED

GREEN – Ready to flush.

RED – Cassette full, or cassette removed, or undervoltage. Toilet cannot be flushed.

YELLOW – Vacuum pump is running. Do not flush toilet.



START-UP CHECKLIST

Before first-time use of the 2500 series sanitation system, check the following:

- The vacuum cassette tank is inserted correctly.
- The fresh water supply tank is full.
- The power supply is on.

The yellow LED illuminates for about one minute.

Then the green LED illuminates.

THE SYSTEM IS READY FOR OPERATION.

FLUSHING THE TOILET

1. Make sure there is enough water in the bowl to cover the flush ball and seal in bottom of bowl. Lift pedal to add water to bowl (if needed for flushing solids).
2. To flush, press pedal down to floor and hold down for 2 or 3 seconds. Keep seat lid closed to reduce noise.
3. The toilet will flush liquids effectively with only 1 pint (0.4 liters) of water per flush.

Never flush toilet while sitting on open toilet seat, or if the seat lid is up.

Do not flush any solid or non-dissolving objects such as paper towels, plastic cans. They can plug or damage system.

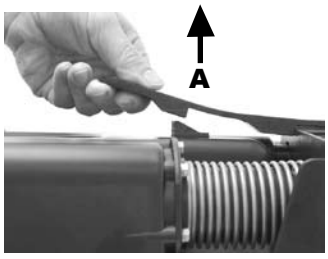
4. Use only rapid-dissolving toilet paper designed for low water flow toilets. Some residential bath tissues may clog the system.

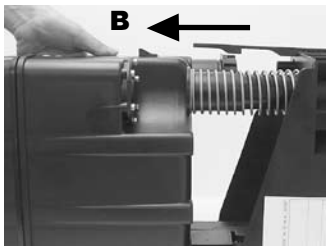
Flush toilet only when green LED is illuminated.

5. If the cassette tank is full, the tank is removed from the docking platform, or the voltage is too low, the red LED illuminates and the system switches off. The system cannot be used until the cassette is emptied, inserted properly in the docking platform, and the correct voltage is restored.

REMOVING CASSETTE TANK (model 2510)

1. Raise the latch (A). Holding the carrying handle (B), pull cassette straight back.
2. When reattaching cassette tank, make sure it is placed correctly on docking platform. Make sure latch engages after pushing tank into platform.

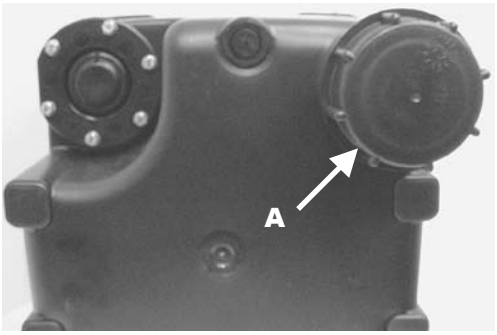




OPERATION (cont'd)

EMPTYING CASSETTE TANK (model 2510)

1. Carry cassette tank to disposal facility.
2. With tank sitting level, open large cap (A), and pour contents into disposal receptacle.
3. If possible, rinse the cassette with fresh water each time it is emptied.

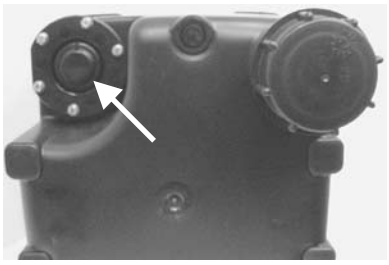


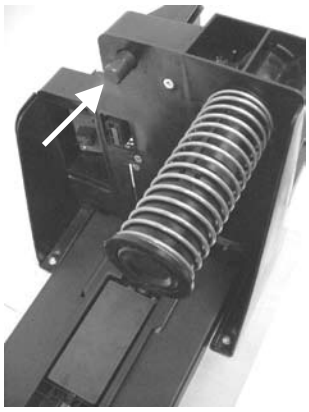
EMPTYING CASSETTE TANK (models 2520, 2521)

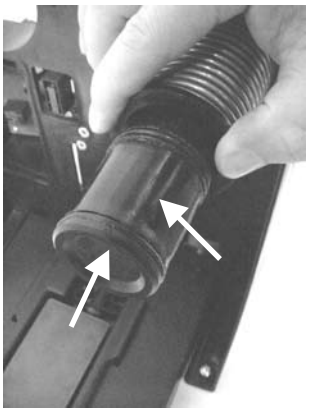
1. Turn off water to toilet and electrical power to cassette vacuum tank.
2. Connect dockside discharge pump nozzle to deck-mounted discharge fitting.
3. Flush valve in toilet should be held open (by pressing down on flush pedal) when dockside pump is used to empty holding tank.
4. Turn on dockside pump to discharge contents of cassette tank.

CLEANING CASSETTE TANK AND DOCKING PLATFORM

Occasionally, clean the connection points on the cassette tank and docking platform where effluent may accumulate. See photos for these locations.

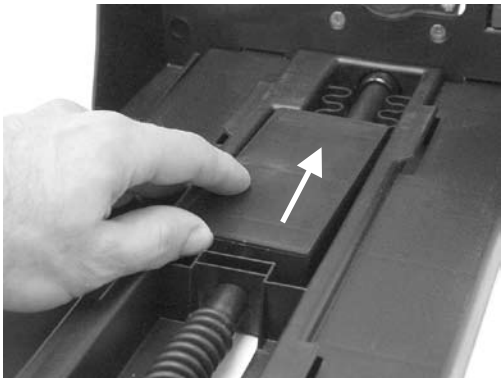




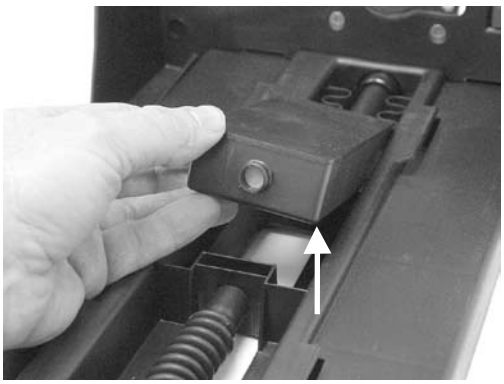


CHANGING THE VENT FILTER

The filter in the docking platform should be changed about every year, depending on frequency of system use. See parts list for part number to order.



1. Push filter toward platform riser.



2. Lift filter out of platform base. When inserting new filter, make sure holes in filter line up with vent line fittings.

TROUBLESHOOTING

Problem	Possible Cause	Service Instructions
1. Vacuum pump will not run.	a. No electrical power.	a. Check input power, circuit breaker and fuse.
	b. Loose or broken electrical wiring.	b. Tighten or reconnect wires at docking platform.
	c. Improper electrical connections.	c. Be sure power wires and wires at vacuum switch are connected to proper terminals.
	d. Faulty vacuum switch.	d. Replace vacuum switch.
	e. Faulty motor.	e. Replace motor.
	f. Shut-down relay prevents pumping.	f. Empty the cassette tank. If cassette is not seated in docking platform properly, put cassette tank back into docking platform until locking latch engages.
	g. Replace motor.	g. Charge battery.
	h. Cassette tank not fully engaged in docking platform.	h. Engage cassette tank until latch secures tank to platform.
2. Vacuum pump will not shut off.	a. A vacuum leak exists in system.	a. Check for vacuum leaks in system with vacuum gauge tester.
	b. Insufficient vacuum (pump creates less than 10 inches Hg).	b. Isolate cassette tank (remove elbow assembly) and use vacuum gauge to check vacuum capability. Could be worn valves.
	c. Faulty vacuum switch (pump creates more than 10 inches Hg).	c. Replace vacuum switch.
	d. Diaphragm not pumping.	d. Tighten set screw in eccentric to motor shaft. Otherwise, check for damage to diaphragm and motor shaft. Replace if necessary.
	e. Blockage in inlet of vacuum pump.	e. Clear blockage from pump inlet.
3. Vacuum pump is running too slow, overheating, blowing fuses or circuit breaker.	a. Motor is worn or defective.	a. Check motor and replace if necessary.
	b. Plugged vent line or vent filter.	b. Disassemble and clean out vent line. Replace vent filter if necessary.
	c. Improper wire size.	c. Wire size too small. Check “Electrical Installation” section for proper wire size.
	d. Improper voltage.	d. Check input power for low voltage.
	e. Vacuum pump clogged with tissue.	e. Remove and clean pump assembly.
4. Toilet will not flush.	a. There is a blockage in the toilet.	a. Open flush ball and check the 1-inch (25mm) orifice at the bottom of the base for blockage and dislodge it. **Never use drain-opening or other household plumbing chemicals.**
	b. Hose between toilet and cassette tank is collapsed or kinked.	b. Inspect hose and replace if collapsed or kinked.
	c. Foreign objects were flushed, causing blockage in system.	c. Clear foreign objects from system. DO NOT flush any non-dissolving items (i.e. sanitary napkins, facial tissue, wet strength tissue, paper towels, etc.) or excessive tissue. Before flushing solids, be sure to add water by lifting the flush lever.
	d. Pump will not run.	d. See problem 1.
5. Tank will not discharge using dockside pump (model 2520/2521).	a. Tank is not adequately vented.	a. Open flush valve in toilet by pressing on pedal.
	b. Blockage in check valve at tank outlet.	b. Disassemble the check valve and remove blockage.
	c. Blockage at bottom of discharge diptube inside the tank.	c. Remove diptube from tank and clear blockage.

SPECIFICATIONS

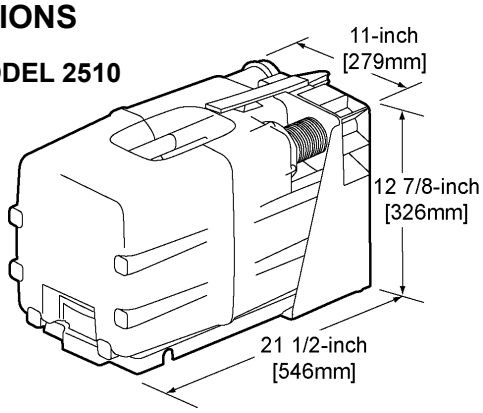
CASSETTE VACUUM TANK SPECIFICATIONS

Model	Empty Weight	Max. Weight	Waste Capacity	Power	Pump Run Time
2510	13.3 lbs. (6 Kg)	42.1 lbs. (19.1 Kg)	3.6 gal. (14 L)	12 VDC, 1.5 amp	approx. 60-70 sec.
2520 2521	14.3 lbs. (9.1 Kg)	43.1 lbs. (19.6 Kg)	3.0 gal. (11.5 L)		

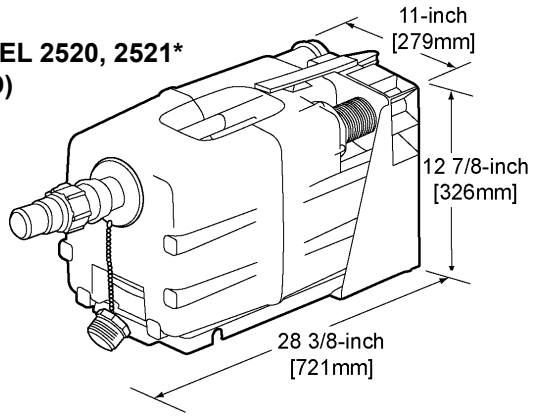
Specifications subject to change without notice.

DIMENSIONS

MODEL 2510



MODEL 2520, 2521* (MSD)



* Model 2521 (not shown) uses a 90° elbow discharge fitting. Dimensions are same as Model 2520 with straight discharge fitting.

CUSTOMER SERVICE

There is a strong, worldwide network to assist in servicing and maintaining your sanitation system. For the Authorized Service Center near you, please call from 8:00 a.m. to 5:00 p.m. (ET) Monday through Friday. You may also write us at Dometic Corp., P.O. Box 38, Big Prairie Ohio 44611.

Telephone: 1 800-321-9886 U.S.A. and Canada
330-496-3211 International

You may also contact or have your local dealer contact the Parts Distributor nearest you for quick response to your replacement parts needs. They carry a complete inventory for the SeaLand product line.

Fax: 330-496-3097 U.S.A. and Canada
330-496-3220 International

U.S.A.
MASTER SANITATION DISTRIBUTORS

U.S.A. – North Central
(IL, IN, KY, MI, OH)

Midwest Marine Supply
24300 Jefferson Ave.
St. Clair Shores, MI 48080
Tel: 586-778-8950
800-860-1540
Fax: 586-778-6108
E-mail: midwestmarine@yahoo.com

U.S.A. - Northeast
(CT, DE, DC, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT, WV)

Northeast Marine Sanitation
69 Florida Street
Farmingdale, NY 11735
Tel: 631-752-7606
800-352-4323
Fax: 631-752-7615
888-283-7606
E-mail: info@northeastsanitation.com

U.S.A. - Northwest
(AK, ID, MT, OR, WA, WY)

Marine Sanitation, Inc.
1900 N. Northlake Way, Suite 121
Seattle, WA 98103
Tel: 206-633-1110
800-624-9111
Fax: 206-633-0317
E-mail: marinesan@mindspring.com

U.S.A. - South Central
(AR, KS, LA, MO, MS, NM, OK, TX)

AER Supply
P.O. Box 349
2301 Nasa Road #1
Seabrook, TX 77586
Tel: 281-474-3276
800-767-7606
Fax: 281-474-2714
E-mail: sales@aersupply.com

U.S.A. - Southeast
(AL, FL, GA, NC, PR, SC, TN, VI)

Environmental Marine
111 S.W. 23rd Street, Suite A
Fort Lauderdale, FL 33315
Tel: 954-522-2626
800-522-2656
Fax: 954-522-5152
E-mail: info@environmentalmarine.com

U.S.A. - Southwest
(AZ, CO, NV, UT, CA-south)

Ardemco Marine Specialties
778 West 17th Street
Costa Mesa, CA 92627
Tel: 949-722-7672
800-253-0115
Fax: 949-642-9582
E-mail: info@ardemco.com

U.S.A. – Upper Midwest
(IA, MN, NE, ND, SD, WI)

PowerHouse Marine
518 Logan
La Crosse, WI 54603
Tel: 608-784-9580
888-752-4539
Fax: 608-784-8422
E-mail: dave@powerhousemarine.com

U.S.A. – Northern California

Fox Marine
6545 Caballero
Buena Park, CA 95131
Tel: 800-826-2873
Fax: 714-690-1511
E-mail: foxmarco@pacificsupplyco.com

CANADA
MASTER SANITATION DISTRIBUTORS

Canada - East

Transat Marine
70 Ellis Drive, Unit 1
Barrie, Ontario L4N 8Z3
Tel: 1-800-565-9561
Fax: 705-721-0747
E-mail: josborn@transat.com

Canada - West

Western Marine Company
1494 Powell Street
Vancouver, BC V5L 5B5
Tel: 604-253-7721
800-663-0600
Fax: 604-253-2656
800-663-6790
E-mail: sales@westernmarine.com

INTERNATIONAL
DOMETIC SANITATION SYSTEM DISTRIBUTORS

Call 1-800-321-9886, email us at sealand@dometicusa.com, or visit www.DometicSanitation.com for the distributor nearest you.

MANUFACTURER'S ONE-YEAR LIMITED WARRANTY

Dometic Corporation warrants, to the original purchaser only, that this product, if used for personal, family or household-like purposes, and if installed according to Dometic's recommended procedures, is free from defects in material and workmanship for a period of one year from the date of purchase.

If this Dometic product is placed in commercial or business use, it will be warranted, to the original purchaser only, to be free of defects in material and workmanship for a period of ninety (90) days from the date of purchase.

Dometic reserves the right to replace or repair any part of this product that proves, upon inspection by Dometic, to be defective in material or workmanship. All labor and transportation costs or charges incidental to warranty service are to be borne by the purchaser-user.

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IN NO EVENT SHALL **DOMETIC** BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, FOR DAMAGES RESULTING FROM IMPROPER INSTALLATION, OR FOR DAMAGES CAUSED BY NEGLECT, ABUSE, ALTERATION OR USE OF UNAUTHORIZED COMPONENTS. ALL IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, ARE LIMITED TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE.

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No person is authorized to change, add to, or create any warranty or obligation other than that set forth herein.

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one (1) year from the date of purchase for products used for personal, family or household purposes, and ninety (90) days from the date of purchase for products placed in commercial or business use.

OTHER RIGHTS

Some states do not allow limitations on the duration of an implied warranty and some states do not allow exclusions or limitations regarding incidental or consequential damages; so, the above limitations may not apply to you. This warranty gives you specific legal rights, and you may have other rights which may vary from state to state.

To obtain warranty service, first contact your local dealer from whom you purchased this product.

Dometic Sealand

Dometic is a customer-driven, world-leading provider of innovative leisure products for the caravan, motorhome and marine markets. Dometic offers a complete range of air conditioners, refrigerators, awnings, cookers, sanitation systems, lighting, windows, doors and other equipment that makes leisure life more comfortable away from home.

Dometic also provides refrigerators for specific use in hotel rooms, offices and for storage of medical products and wine. Dometic's products are sold in almost 100 countries and are produced mainly in Dometic's own production facilities around the world. Dometic has more than 4,400 employees.

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